



Exclara Product Brief
Preliminary

EXM061

11.2W Dimmable LED Ballast

Product Overview

The EXM061 is a high efficiency, power factor corrected LED driver optimized in size and performance for recessed down-lighting applications. A key attribute is that it can be used with standard leading and trailing edge phase dimmers making it suitable for all indoor lighting applications.

It is among the industry's smallest designs employing these features. It's Patent Pending design offers truly reliable operation with all standard dimmers with dimming resolution down to 1% of full scale output.

Features	Applications
<ul style="list-style-type: none"> • High Efficiency , 81% • Triac Dimmable • High Power Factor – 0.98 	<ul style="list-style-type: none"> • Recessed down-light fixtures • Sconce lighting • Cloud lighting

Application Diagram

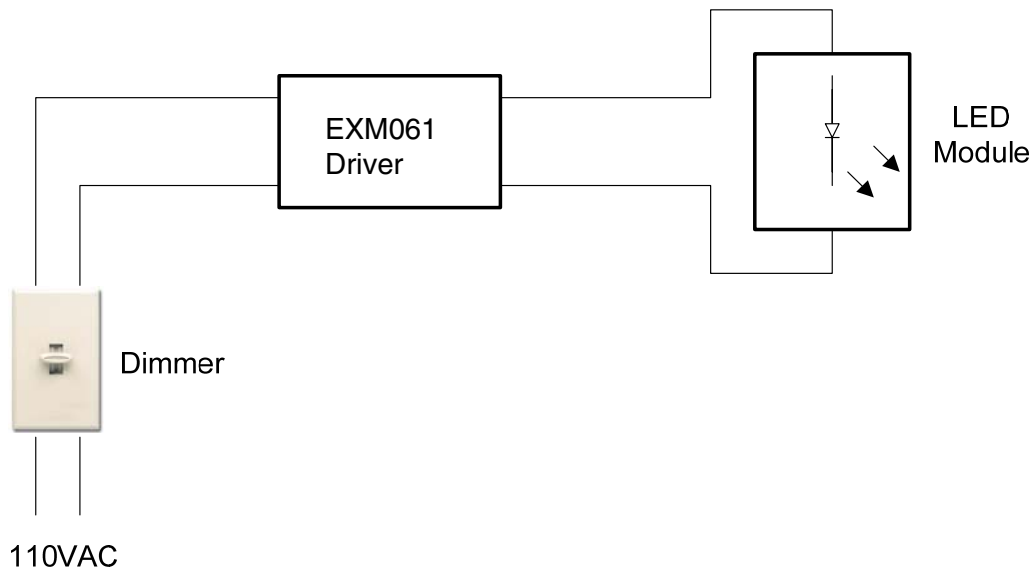


Figure 1. EXM061 Application

Ordering Information

Format: EXM061 - yyy where:

EXM061 = model number yyy = output code

Table 1 – Product Ordering Table

Part ID	Max. Input Power (W)	Nominal Input Voltage (VAC)	Output Current (mA)	Output Voltage (min)	Output Voltage (max)
EXM061-265	11.59	120	265	30	38
EXM061-280	12.25	120	280	30	38
EXM061-320	14.0	120	320	30	35

(For other output configurations contact Exclara)

Key Electrical Characteristics

(Tc = -20°C – 55°C. Typical values are at Tc = 25°C)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Input voltage	V_{IN}		110		132	VAC
Input Frequency	freq _{IN}		47		63	Hz
Power Factor	PF	$V_{IN} = 120VAC$ at rated load	0.95	0.98		W/VA
Total Harmonic Distortion	THD	$V_{IN} = 120VAC$ at rated load	8	10	18	%
Input Current	I_{IN}	$V_{IN} = 110VAC$.126	A
Total Power output	P_{OUT}				11.2	W
Efficiency		I_o at rated load, $V_{IN} = 120VAC$		81		%
Output Voltage Range ⁴	V_o		30	33	38	V
Output Current ³	I_o				320	mA
Analog Dimming Resolution ²		% of rated output current	1		100	%

Notes:

1. Full scale current implies value of current-set point. 100% of Full Scale current implies no dimming. 50% of Full Scale current implies 50% dimming level, etc..
2. Some dimmers have limited resolution preventing the 3% resolution specification to be met. Variability due to dimmer model.
3. See order information for output current settings.
4. Maximum voltage is for the lowest available output current setting 265mA, see ordering information table



Key Environmental Characteristics

Parameter	Value
Storage Temperature	-40°C – 85°C
Ambient Temperature for reliability calculations	25
Maximum case temperature, Tc	65C
MTBF	
Warranty at Tc=55 C	5 years
Operation hrs per day	11hrs
Humidity	Damp and Dry
Sound	24 dBA, Energy Star
Vibration	IEC 60068-2-64; IEC 60068-2-6
ROHS Compliant	Yes

copyright © 2011 Exclara